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ABSTRACT

This document presents a historical sketch of the Center for the Study of Higher Education, The Pennsylvania State University for its first five years, 1969-1974. Emphasis is placed on aims and organization, the center's role in higher education academic programs, studies relating to higher education policy and operation, service as "consultants in residence," workshops, conferences, related activities, the future, and a summarization of the center's activities. (MJM)

The Center for the Study of Higher Education
The First Five Years 1969-1974

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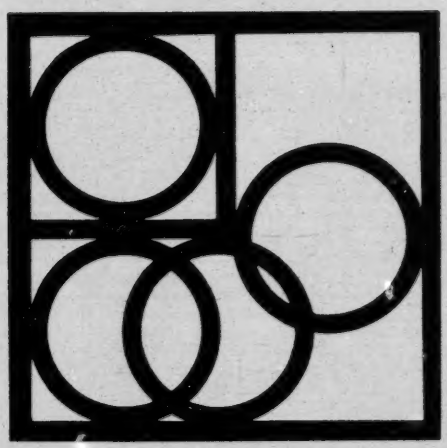

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U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

Center for the Study of Higher Education
The Pennsylvania State University
University Park, Pennsylvania

June 1974

UNIVERSITY ADMINISTRATION

President — John W. Oswald, Ph.D., LL.D., D.Sc.

Provost — Russell E. Larson, Ph.D., D.Sc.

CENTER FOR THE STUDY OF HIGHER EDUCATION*

Director and Professor — G. Lester Anderson, Ph.D., L.H.D., Doctor (Honoris Causa) (1969)

Assistant Director — William Toombs, Ph.D. (1972)

Research Associates and Professors

Larry L. Leslie, Ed.D. (1970)
S. V. Martorana, Ph.D. (1972)

Research Associates and Associate Professors

Kenneth P. Mortimer, Ph.D. (1969)
William Toombs, Ph.D. (1972)

Research Associate and Assistant Professor

James O. Hammons, Ph.D. (1973)

Associate — Angelo C. Gillie, Ed.D. (1969)

Staff Associate — Renee C. Friedman, B.A. (1969)

Staff Assistant — Dorothy W. Fisch, M.A. (1973)

Graduate Assistants as of April 1, 1974

Janet N. Bacon, M.A. (1972)
David G. Watkin, B.A. (1972)
Howard F. Miller, Jr., M.S. (1973)
Ann Kieffer Bragg, B.A. (1973)
J. Leonard Salazar, M.Ed. (1973)
Timothy R. Dangel, B.A. (1973)
David A. Weiss, B.S. (1973)
W. Gary McGuire, M.Ed. (1974)
Lois H. Heckman, M.Ed. (1974)

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Betty Meek (1972)
Joan Irwin (1972)
Kathy Bell (1973)
Diann McVey, B.S. (1974)

*Listed under each heading according to date of Center appointment. The year of appointment has been given in parentheses following each name.

INTRODUCTION

The Center for the Study of Higher Education, established in 1969, was five years old on April 1, 1974. This report covers the activities of the Center for the five year period. One important area of study by the Center staff has been research centers, institutes, or like organizations that are now a significant part of the organizational structure of the large contemporary American universities. It seems appropriate, then, that the Center should tell its own story. It is our desire that this report be of interest and perhaps some utility to professors of higher education who will be interested in how the study of higher education might be pursued in organizational terms. It is also our desire that it be found as a suitable account by Penn State's senior administrators of the stewardship and validity with which the Center has carried out its assigned mission. Those associated with the Center in any capacity have, with few exceptions, found the Center activity professionally exciting and personally rewarding, and have appreciated the generous support extended by many of the faculty and staff of the University.

G. Lester Anderson, Director
University Park, Pennsylvania
June 30, 1974

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I. AIMS AND ORGANIZATION

The study of higher education aims to examine higher education as a social institution and as a process. The descriptive and analytical studies of higher education researchers and scholars provide information to aid in planning and pursuing educational goals. Ultimately, such studies should lead to the development of wiser social policy for higher education at the institutional, state, and national levels. It should also contribute to the capacity of American higher education to respond to increasing numbers of students of diverse talents, aptitudes, backgrounds, and needs who seek a college education. In this way the varied manpower needs of the states, the regions, and the nation can best be met.

The Pennsylvania State University and the Commonwealth over the years have not been unmindful of the utility of studies of higher education. The University has for a number of years offered programs through the graduate school that prepared young men and women for teaching, administrative, and research careers in higher education. In establishing the Center for the Study of Higher Education, the University desired to expand, complement, and consolidate its programs of research, education, and service in higher education *per se*. The Center was founded to provide information relevant to decision making in higher education and to aid in the formulation of potential higher education policy. More than this, the Center, through research and scholarship, was intended to awaken consciousness to opportunities, enhance sensitivity to the consequences of decisions, suggest alternatives, and foster introspection and debate on the part of faculty members and administrators, both at this University and beyond.

The trustees of The Pennsylvania State University established the Center for the Study of Higher Education in January 1969. The Center was made budgetarily and administratively responsible to the Office of the Provost of the University. A lump sum of money was assigned for the first year's operation, and subsequently funds have been provided for each succeeding year. Outside funding was to be acquired for special projects, but the University subvention has been ample to maintain a viable Center.

When the Center was organized, a decision was made to seek persons for the staff who were more interested in policy (e.g., governance) and occupational-professional education than in instruction and student evaluation since a Division of Instructional Services

accepts the latter types of responsibility in the University. In accordance with this guideline, a Director was chosen who has had a primary interest in education for the professions and in organization, administration, and governance.

The first and only Director to date, G. Lester Anderson, assumed his duties on April 1, 1969. Dr. Anderson came to his position after a number of years of experience in the field of higher education both as a professor and as an administrator. He began immediately to recruit a staff. A Research Associate, Kenneth Mortimer, skilled in the area of governance was appointed on a tenure track basis in 1969. Dr. Mortimer was also appointed as an Assistant Professor of Higher Education in the College of Education in 1969 and was promoted to Associate Professor in 1972. Starting in December 1972, he gave fifty percent of his time as a special consultant to the University President on a one-year appointment. The second person to join the Center in the fall of 1969, first as a visiting scholar, then as Associate Director and Research Associate, was Stanley O. Ikenberry. Holding the rank of Professor of Higher Education in the College of Education, he actively pursued a program of research in the area of governance. He later submitted his resignation, the only one so far received by the Center, as Associate Director, in 1971 to become Senior Vice-President for University Development and Relations at Penn State. In July 1970, Dr. Larry L. Leslie joined the staff as Research Associate and Associate Professor in the College of Education. He was promoted to Professor in 1973. Dr. Leslie has compiled studies on the finance of higher education with particular reference to student financial aid and tuition policies. He has also been carrying forward a series of studies on education for the professions with special interest in the social responsiveness of the professions. Dr. William Toombs was appointed to the Center in July 1971 as Assistant Director and Research Associate and became Associate Professor of Higher Education in 1973. With an emphasis on the State Colleges and Universities of Pennsylvania, he has concentrated his study in the areas of manpower and educational policy dealing with the job market and the relationship between education and society. Graduate education, institutional effectiveness, undergraduate curriculum design, and undergraduate studies have also been subjects of study by Dr. Toombs. A former Vice President for Student Affairs, Charles L. Lewis joined the Center as a temporary Associate in September 1971, and shared with the staff his extensive knowledge of Penn State. He left one year later to assume a leadership position as Executive Director of the American Personnel and

Guidance Association in Washington, D.C. Sebastian V. Martorana, former Vice Chancellor for Two-Year Colleges and Provost for Technical-Vocational Education in the State University of New York, accepted an appointment as Research Associate and Professor of Higher Education in September 1972. His contribution has been in the areas of long-range planning and coordination of colleges and universities of all types; a special concern for the community college as a level of education; and an interest in occupational postsecondary and higher education, including manpower development and training. By July 1, 1973 the Center was fully staffed when James Hammons, with a background in the community college, was appointed. He also holds an appointment as Assistant Professor of Higher Education in the College of Education. Dr. Hammons has concentrated on the improvement of the teaching-learning process, staff and organizational development, and modern techniques and theories of management with an emphasis on the community college. Of the six professional research associates, four at the present time are fully budgeted in the Center and two have their salaries divided between the Center and the College of Education.

In addition to the research associates, the Center has a strong support staff. A part-time staff associate, Renee Friedman, has been with the Center since its first year of operation. Several visiting scholars, bringing with them varied experiences and focusing on higher education from different perspectives, have contributed to the Center's work. Four full-time secretaries, eight graduate assistants, a computer and statistical assistant, a library assistant, and an editor have all assisted the research associates.

The staff have a flexible schedule, a specialized working library, generous professional travel funds, the stimulation of active professional associates, and, of important significance, major interaction with colleagues in the various departments and colleges of Penn State.

A preliminary statement of potential Center roles was prepared at the time the Center was authorized. These roles were tested during the Center's first years and have since been modestly modified. The Center has always been an "open" organization, free to redirect its efforts within wide boundaries, and minimally organized in bureaucratic terms. It has had responsible yet moderate direction and supervision from the central administrative officers to whom the Director has been accountable. In other words, the Center has had a high degree of autonomy.

After nearly five years of activity the Center can define its current role as follows: (1) It supports the higher education academic program of the College of Education. (2) It conducts studies that relate to matters of higher education policy and operation. These studies are designed to have relevance to Penn State University or to higher education in the Commonwealth. However, they are also generally of interest to the higher education community of the nation. (3) The Center serves the Penn State University community in a role that is perhaps best described as "consultants in residence." (4) The Center staff are responsible for organizing a number of conferences and workshops and for serving as advisory consultants to institutions and agencies, particularly those in the Commonwealth.

II. CENTER ROLE IN HIGHER EDUCATION ACADEMIC PROGRAM

The graduate program in higher education has as its primary goal the preparation of individuals who can identify, analyze, and cope with the significant problems and issues in higher education. This program, leading to the doctorate with a major in higher education, prepares students for careers as administrators, educators, and researchers in colleges and universities and in a variety of public and private agencies and associations. When the Center was organized, it was charged with giving support to the instructional program in the College of Education. The Center contributes to the higher education program in several ways: as a socializing agent, through formal courses and advising and thesis guidance responsibilities, through specialized seminars and lecture series, through its library, in its research activities, and by its financial support to students.

As a socializing agent, the Center provides a total learning environment, so organized as to shape the student's outlooks, refine his skills, and develop a professional identity. The "climate" of the Center is one of professional and educational orientation where the normative behavior of a professional community is manifested. The attitudes and motivations as well as cognitive and intellectual skills of the professional at work in higher education are continuously observable. The professoriate collectively believes in the necessity of the socialization process and conveys its significance to the students. While the process sometimes is subtle, it must be conscious if it is to be utilized fully. Although the process is powerful, it must be voluntary.

The interaction of the master scholar and the apprentice in experiences extending beyond the classroom facilitates attitudinal change. The mentor becomes a role model who can be respected, emulated, and imitated until the time that the apprentice achieves the identity of a professional man or woman. Center graduate assistants and other individuals contributing to the Center's research effort benefit from a one-to-one relationship as they are guided in their research and interact with the scholar on a regular and continual basis. The influences of a single professor, the chairman of a student's "committee," and a student's advisor are significant in providing appropriate socializing effects in the learning environment. It should be clear that the process of socialization affects not only the students working in the Center but also a fair proportion of students enrolled in the program.

Through various activities, including conferences, meetings, informal discussions, and social gatherings, the Center provides experiences which mold the neophyte into the professional. A case in point is the provision of a "hospitality suite" at the AAHE Convention. Higher education faculty and students can gather there for informal discussion in the midst of a highly-structured, professional conference. In such an atmosphere students evaluate themselves in terms of how they function within the broader professional environment. Group transportation to the convention, which the Center provides for the assistants and offers to other higher education students if they can be accommodated, has promoted discussion and feedback at an opportune time. Center graduate assistants, benefiting from their proximity to the professors, the Center library, and to each other, exchange ideas on a day-to-day basis and feel a community allegiance with their fellow colleagues in higher education. This sense of community has prompted them to become more involved in the Higher Education Student Association (HESA) and its activities. The Center wholly financed and jointly sponsored with HESA a series of seminars which utilized "outside" personnel. Through these activities, higher education students become aware of the appropriate behavior as a group as well as individually and share in the socialization process through reinforcement and feedback. The goals, values, and patterns of behavior become internalized and are translated into external actions and life style. The end product is the achievement of autonomy, commitment, motivation, and identity for the individual who has been educated for the role he will assume as educator, researcher, or administrator.

The higher education instructional program offers courses in four broad areas of higher education: (1) history and philosophy; (2) organization and administration; (3) curriculum and instruction; and (4) the college student. The Center professors as members of the graduate faculty have all taught courses in the program and have been responsible for conducting seminars, directing internships in higher education, and carrying a normal faculty load of advising and thesis directing. In March of 1971, a member of the Center staff, Dr. Leslie, was asked by the College to chair the program in higher education, and he continues to serve in this capacity. Faculty expansion in higher education in recent years has been primarily the result of additions to Center staff. Higher education as a program has only three and one-third faculty positions, but, through the Center, the number of professors at work has been significantly increased. Center faculty have been responsible for 1070 student semester credit hours or eighteen percent of the student semester credit hours generated since the establishment of the Center. The percentage of courses taught by Center staff members is much higher because they tend to teach the smaller, advanced seminars, while the regular higher education faculty members take major responsibility for the larger basic courses.

Along with the quantitative dimensions are estimates of quality, both actual and potential. The current generally high reputation of the higher education program rests on the substantial and growing recognition the faculty members have attained. The Center faculty, as do the other higher education faculty, meet their instructional responsibilities with dedication. Their plans for further scholarly productivity, their leadership roles in higher education on the local, state, and national levels, and their working relationships with operating postsecondary educational institutions all contribute to the continued strength of the program.

The Center library serves the higher education faculty and students by providing current resources and reference services. The materials, which correspond to the four broad areas of the higher education program, include approximately nine hundred books, forty-five periodicals, newsletters, research reports, and a small college catalogue collection. Current education directories, compilations of educational statistics, and yearbooks as well as several general reference books, are also available. The library has collected appropriate Penn State reports and research publications. In addition to these resources, two thousand

titles of more fugitive or ephemeral material, catalogued by subject area, are contained in the vertical file. Much of this material has been distributed on a limited basis to selected recipients; consequently, the value transcends the size of the collection. Areas of concentration in the file system include accreditation, conference reports, evaluation, governance, planning, statewide coordination, and university and college master plans. Appropriate bibliographies and indexes are kept current and accessible. The sizeable collection of both general and specialized bibliographies in higher education has been supplemented by Center bibliographies and course reading lists. The library also subscribes to several indexing services, including Educational Resources Information Center (ERIC) monthly and annual indexes. Although the ERIC microfiche and certain journals are not available in the Center library, faculty and students can survey the scope of material written on a specific subject. The availability of these indexes and the familiarity of the present library staff assistant with Pattee Library provide a "window" to other resources.

The Center library also serves several lesser functions. The library has been used, in a secondary capacity, as a resource support unit for the National Science Foundation Evaluation Project at Penn State, the Fulbright-Hays Conference held on the campus in the spring of 1974 for visiting scholars, and others. Center materials are frequently on loan to the University's administrators, and particularly to the staff of the University's Offices of Institutional Research and Planning. It also serves as a distribution point for Center publications and reports.

The Center provides an unusual opportunity for integrating the academic program with professional research activities. The higher education program expects to prepare students who will be competent to gather data through skilled techniques and ethical procedures. The Center faculty are continually engaged in various research activities and are available to guide students in the program. Center graduate assistants as well as several other students work closely with individual staff members and attain first-hand experience of methodological and research problems in higher education. All students in the program can on occasion participate in significant research activity in their field of interest.

The Center at times has offered financial support to doctoral students completing their research when the program of research coincides with the Center's research or service interests. The Center has partially funded eleven completed doctoral dissertations and is

supporting seven now in progress. Only six of the eighteen students involved have held assistantships in the Center. The graduate assistantships provided by the Center have become an important source of financial aid for students because the higher education program itself has a limited number of assistantships available.

The Center has contributed significantly to the recent expansion and growing visibility of the higher education program at Penn State. The Center faculty, in turn, profits from the opportunity to teach and interact with the full-time faculty and the students in the program.

III. STUDIES RELATING TO HIGHER EDUCATION POLICY AND OPERATION

An introductory word may be said about methodology as used by Center staff pursuing their studies. When the Center employs the phrases "study of higher education" and "research and scholarship," the terms are to be interpreted broadly. Thus, the Center produces synthesizing and analytical studies as well as studies which conform to more traditional methodological research criteria.

In the following survey of the literature many of the books, chapters, journal articles, and ERIC reports are mentioned. A full listing of the Center staff publications from the date of their Center appointment follows the text in Appendix E. This bibliography is organized according to the framework, described below, to be used in this paper for discussing the literature.

A three-volume monograph, *Insights into Higher Education: Selected Writings of CSHE 1969–73*, contains a number of the studies conducted by the Center. The first volume deals with governance, the second with community college and postsecondary occupational education, and the third with curriculum, graduate and professional education, and funding. Because the original supplies of early publications had been depleted, this three-volume set (to be published spring and summer term 1974) makes certain studies and reports available again while giving an overview of Center scholarly activity for the five-year period.

Although the Center studies have primarily dealt with the areas of organization, administration, and governance and with occupational education, particularly professional and paraprofessional education, the Center's interests have expanded in the last few years with the addition of new staff members and the changing issue orientations of the academic

community. Since a topical approach to a discussion of the Center publications has become unwieldy, a general framework—concentrating first on studies of internal educational structures and then on studies of the university and society—has been set up as an expedient for this discussion. The studies of internal educational structures include organization, governance, accountability, management, planning, evaluation, degrees, educational programs, curriculum, and instruction. The studies of the university and society include the relationship of the university with social structures, with the economy, with fiscal and tax structures, and with the political structures. The society constantly and necessarily interacts with the internal educational structure as well as the university as an entity; therefore, the division between the two is understood to be one of degree only.

The first and largest section under the internal educational structure is organization, governance, and accountability. Much of the Center's work in the area of organization has been in conjunction with the University administration in its role as "consultants in residence," to be discussed in detail later. As such, the Center gave assistance in reviewing the State Master Plan for Higher Education and in providing background articles and assisting in the drafting of the Academic Policy Plan for Penn State. It also contributed toward other organizational studies.

Books or chapters in books and articles by Center staff have concentrated on the organization and relationships of institutes, academic departments, and colleges and universities. Supplementing the role of the conventional academic departments, institutes, centers, and research units have grown prolifically in the past few decades. By carrying out various purposes, following different organizational models, and functioning at all levels of the organizational hierarchy, they have brought a structural alteration and a new dimension to institutional organization at the postsecondary level. Attempting to learn how to heighten the contributions and diminish the weaknesses of these units, the Center engaged in a number of in-depth studies to explore the diversity in their origins, purposes, functions, and structures. The result of an intensive Center study, *Beyond Academic Departments* (Ikenberry and Friedman, 1972) published by Jossey-Bass, analyzed all aspects of centers and institutes, considered the criticisms against these units, and evaluated them in terms of how they serve the purposes of the university. To provide a data base for looking at these questions and issues, the authors queried university administrators and institute directors and

drew upon several of the earlier studies in which the Center participated. Although the bulk of the information was obtained from institute directors, two Center reports in particular served as introductory studies. *A Profile of Proliferating Institutes* (Ikenberry, 1970) reviewed selected characteristics of institutes and centers in fifty-one land-grant universities while another Center report (Norman, 1971) published the results of a case study of centers and institutes at Pennsylvania State University. In an endorsement of research institutes, "A Rationale for Research Institutes" (Anderson, Frey, Ikenberry, and Swope, 1972) explained that institutes and centers can overcome the structural ridigity that has prevented academic institutions from responding more enthusiastically to modern research demands. Demonstrating the ability of these units to adapt to specific situations and contemporary problems, "Water Center Organization and Management" (Anderson, Frey, Ikenberry, and Swope, 1972) validated the assumption that these institutes were productive, accountable, and flexible. This last study was conducted by John Frey with assistance of the Center staff under a grant from the Department of the Interior. The study has great significance for Water Resources research centers located in the fifty states and Puerto Rico.

A monograph, *Institutional Self-Study at The Pennsylvania State University* (Mortimer and D. Leslie, 1970) described the institutional research being conducted at this university in 1969-70. Since no one agency has been responsible for institutional research, the study provided a representative selection of the kinds of studies and types of offices which conducted the research. In the conclusion, the procedures of institutional research at Penn State are placed in the context of problems of higher education governance.

Understandably, the relatively new phenomenon of centers and institutes required study and evaluation; however, the traditional departments, the fundamental elements of colleges and universities, also seemed to lack a comprehensive theory of academic organization. Designed to contribute to a general theory, a research analysis (Hobbs and Anderson, 1971) developed a model based on the two fundamental departmental processes, namely governance, the process by which decisions are made; and administration, the process by which programs and policies are carried into effect. This study was possible in part because Anderson had participated in a larger study of departments, Dressel, et al., *The Confidence Crisis*, and because of the cooperation with Walter Hobbs, a member of the higher education faculty at the State University of New York at Buffalo.

Colleges and universities constitute a significant segment of the institutions fundamental to the nation's well being. On this level, the Center's publishing efforts have dealt with an historical merger, the land-grant university, the community college, and institutional cooperation. A narrative, "The Story of an Educational Merger: The State University of New York and the University of Buffalo" (Anderson, 1971), presented a brief history of both institutions, described the legal union, and discussed the consequences of this reorganization. Turning from the past to the future, the Center has prepared a book called *The Land-Grand University: Promises for Tomorrow* (Anderson (ed.), to be published) that will discuss this unique institution's possible future, including its goals, governance patterns, external degrees, and occupational offerings. Since Center staff articles on the land-grant university have concentrated on its service as a social institution more than as a unit of organization, these articles will be mentioned later.

The prospects for the community college have been discussed in an article, yet to be published, entitled "A New Era for the Two-Year College" (Hammons and Martorana, 1974). Because of the widespread growth of the community college, more students are following a multi-institutional pathway to accomplish academic qualification. "Acting Through Articulation Among Associate and Baccalaureate Degree Institutions" (Martorana, 1972) described the impact of the community college upon faculty and institutional practices of the higher education system as a whole. Another article, "Reluctant Courtship: Community College and Graduate School" (Toombs, 1972), stated how the peculiar personalities of these institutions could benefit from a liaison based on the construction of initial understanding and knowledge. Believing that institutional cooperation can improve the quality, bring diversity, and decrease the costs of higher education, several colleges and universities have joined together in consortia. A report on two nationwide surveys on cooperative consortia involving private junior colleges is presently being prepared and will be published jointly by AACJC and the Center (Martorana, Kuhns, Witter and Sturtz, 1974).

The study of university governance as has been noted has been a continuing theme of the Center publications. Over the past ten years, colleges and universities have seen the beginnings of a major realignment of power, authority, and influence. A Center report, *Governance and Emerging Values in Higher Education* (Mortimer, Ikenberry, and Anderson, 1971), discussed the authority structure, faculty participation, and governance issues. The

effect of differing modes of governance was shown to be critically significant to the maintenance of basic value systems of postsecondary education. The study placed governance in an historical perspective and made projections about its future. Attempting to define the roles for participation of faculty, students, and administrators in campus governance, a Center report (Ikenberry, 1970) explained the peculiarities of postsecondary institutions as organizations and discussed several issues in the organization debate since it is often the misunderstanding of these structures that leads to disillusion and frustration in struggles for power. The report recommended a reform of campus substructures and a restructuring and strengthening of student, faculty, and administrative organizations to promote greater influence by more individuals and groups. Two journal articles by Center staff, appearing in a special journal issue on governance, trends and consequences, delineated some of the recurring themes and explored the complexities of governance participation. Serving as an introduction to this issue, the first article (Ikenberry, 1971) defined six themes dominating the analyses that followed. The other article, "The Dilemmas in New Campus Governance Structures" (Mortimer, 1971), evaluated joint versus separate governance structures and related many of the higher education issues in governance. Providing background on the subject from a different perspective, a chapter in *The State of the University* (Mortimer and McConnell in Kruytbosch and Messinger (eds.), 1970) explained the concept of "democratic participation" in American colleges and universities. In addition to describing the academic authority structure and faculty academic roles and orientation, it related faculty participation in institutional governance to certain organizational characteristics and to certain processes of democratic government in nonacademic institutions. After stating that the rise of oligarchies is a "normal phenomenon in democratic politics, in professional associations, and in academe," the question asked was what model of governance would best ensure that the ruling elite would be responsive to its constituency. The authors concluded with an endorsement of shared authority.

Believing in shared responsibility as the most desirable form of academic governance, the authors of *The Faculty in University Governance* (McConnell and Mortimer, 1971) explored the problems of academic government in relation to administrative authority, to governing boards, and to external forces. Prepared under the auspices of the Center for Research and Development in Higher Education of the University of California at Berkeley,

the basis of this book was three intensive case studies. The structure and processes of governance had been analyzed at the University of California at Berkeley (Mortimer, 1970), the University of Minnesota (Deegan and Mortimer, 1970), and Fresno State College (Deegan, McConnell, Mortimer, and Stull, 1970). The variations at these institutions accented some of the changing patterns of faculty participation in American higher education.

An academic senate is one of the governance forms permitting shared authority and faculty participation. The Center presented a formal report, *Academic Senates: Some Models with Background Material* (Anderson, Mortimer, Hull, and D. Leslie, 1970), to the President of Penn State. Published by the Center as an occasional paper, it discussed current trends in faculty participation, aspects of variability among academic senates, three specific senates, and models for faculty participation in university governance. Later, a report on the academic senate at Penn State (Mortimer and D. Leslie, 1971) was published to provide detail on the senate's 1966 reorganization, its activities, its function, its committee composition, and its relationship to the administration. The conclusion to the report warned that "reforming the *structures* of governance does not guarantee that new structures will prove better or more effective than the old."

In several colleges and universities the increased demand for a larger faculty role in governance has led to collective bargaining. This mode of faculty-administrative relationships is most significantly characterized by codified authority relations as embodied in legally binding agreements. *Collective Bargaining: Implications for Governance* (Mortimer and Lozier, 1972) described several possible effects of collective bargaining upon an institution. This Center report included an explanation of the extent of collective bargaining, of collective bargaining as a form of shared authority, a definition of the bargaining unit, and the scope of negotiations. In this research effort, thirty-one contracts were reviewed for their governance-related provisions. An extensive bibliography on collective bargaining concluded the report. In a chapter in *Faculty Unions and Collective Bargaining* (Mortimer and Lozier in Duryea and Fisk (eds.), 1973) contracts in four-year colleges and universities were described and analyzed in terms of the bargaining association constituency, association rights and privileges, personnel policies, and provisions for faculty participation in governance. One section was devoted to describing the extent of coverage regarding salaries, fringe benefits, and working conditions. A summary of collective bargaining agreements in eight Penn-

sylvania colleges and universities as of April, 1973 has been published as an occasional paper by the Center (Boyers in collaboration with Sweitzer, 1973). While no attempt has been made to correlate these agreements with other negotiated contracts, the Boyers-Sweitzer paper reviewed the relationship between the collective bargaining agreements in the eight institutions and the general provisions, wages and hours, and conditions of employment. *Anatomy of a Collective Bargaining Election in Pennsylvania's State-Owned Colleges* (Lozier and Mortimer, 1974), a Center publication, stems from the 1971 election in the state colleges of Pennsylvania to choose a bargaining agent. The voting behavior of the faculty members was studied in relation to faculty characteristics and to attitudes and/or opinions about several key issues of collective negotiations. (This study was derived from Lozier's doctoral thesis, directed by Mortimer.)

If the faculty do not recognize existing authority as legitimate, their reaction can threaten the stability and continuity of academic governance. Little data have been available on how faculty perceived academic decision making at various institutions by various constituencies for selected issues. A Center research effort (D. Leslie, 1973) examined faculty perception of governance at nine Pennsylvania institutions. (This study was derived from Leslie's doctoral thesis.) A study to be reported at a later date will examine the operational governance patterns in six of these nine institutions. An earlier attitudinal study (Moore, 1971) explored whether community college faculty members in Pennsylvania were inclined toward collective bargaining. Along with this research, another study investigated the relationship between identified career patterns and faculty attitudes toward progressive-traditional educational issues (Patterson, 1971). These studies, derived from the doctoral theses of Moore and Patterson, provided insight into the conflicts and consistencies between institutional goals and individual faculty goals.

Students have struggled through the ages to have a significant effect upon the decision-making process in the university. The idea of a student's union (i.e., a union in the labor-industry mode, not a student activities center) as a means available for students to have a constructive influence upon university governance has been assessed by a university administrator and educator who holds a doctorate in industrial labor relations. His report, *Students and Unions* (Bucklew, 1973), was published by the Center. Although the idea of a student union is a controversial one, the student unrest of the 1960s stressed the need for

administrators and faculty to find acceptable means for student participation in governance. One of the first Center publications was a bibliography on student unrest on the American campus (D. Leslie, 1969). Although the bibliography updated earlier efforts, its primary purpose was to provide a useful list of the most thorough and available bibliographies on student unrest and activism.

Administrators, faculty, and even students within colleges and universities must be accountable and will be so held. The external pressures of society and government upon these institutions as well as the internal policy decisions within them contribute to the complexity of accountability in higher education. An ERIC publication (Mortimer, 1972) has defined accountability in relation to management, evaluation, and responsibility; analyzed external forces that exert significant control over postsecondary institutions; and described the authority, behavior, and organizational complexity of internal accountability. The report contended with such conflicts as academic freedom versus organizational discipline, accountability versus autonomy, and centralization versus decentralization. A projection of possible trends for the 1970s and an extensive review of the literature concluded this paper. Two of the chapters from this ERIC publication have been reprinted in a book on accountability (Mortimer in Hostrop, Mecklenburger, and Wilson (eds.), 1973). A paper, "Accountability and Governance in the Seventies" (Mortimer in *The Management and Financing of Colleges*, 1973), combined these two concepts which will have considerable impact on the future of higher education.

Considering the uniqueness of the intellectual-professional community within colleges and universities, a journal article entitled "Bureaucracy, Idiosyncrasy, Tolerability and Academic Personnel Administration" (Anderson, 1973) surveyed the effects of the organizational character and governance processes upon the management of academic personnel. Since the primary locus of academic personnel administration is in the department, this organizational character, according to the author, has provided a form of management that is decentralized and non-bureaucratic. With the shifting force toward collective bargaining and affirmative action, perhaps the power inherent in departments and in their faculties to make personnel decisions may be impaired. The author concluded, however, that no significant change will undermine, in the foreseeable future, the quality and effectiveness of a decentralized administrative structure based on the professional standards and judgments of academic peers.

If an institution is to meet its obligations and achieve its goals with a minimum waste of human and material resources, good management is essential—even though it may be non-bureaucratic and decentralized at certain levels. Management should be carried out with perspective rather than by instinct. It must be more comprehensive than daily supervision of operations and more concrete than some "visionary projection" about the future. A study to be published as a Center monograph this fall will describe applied procedures of implementing practices and policies in the area of management. For use by both two- and four-year colleges, *A Practitioner's Guide to Management-By-Objectives* (Hammons, 1974) will explain in detail one method of leading people to accomplish certain objectives. Essentially, the method includes a statement of what must be accomplished; an awareness and understanding of these limited goals; a periodic review and modification of the objectives if necessary; and an evaluation of behavior in terms of the stated objectives. A selected bibliography (Smedley, 1970), solely devoted to the concept of leadership, was issued by the Center as one of its early publications in the area of management.

Management with perspective can only be attained through conscious planning efforts. Institutions will have to consider the present trends in higher education, the phenomena of change, coordination of postsecondary education, and the development of more adequate planning tools and techniques. Higher education is now experiencing a period of enrollment stabilization which will have profound implications for postsecondary education. "Higher Education and the Steady State" (L. Leslie and Miller, 1974, in press) has examined this current trend of "no growth" in higher education. After presenting a framework for viewing this phenomenon and examining the ways in which institutions can respond, the paper has predicted that colleges and universities will be able to plan, not only for this period of stabilization, but also for eventual qualitative as well as quantitative growth.

Scheduled for publication this fall, *Search for Substance: Innovation and Change in Higher Education* (Martorana and Kuhns, 1974) will analyze the theories and processes of change and discuss the means of initiating substantial changes in postsecondary education. Another study now underway will correlate various theories and plans for change with the actualization of these plans in two-year colleges. This study is an evaluation of the Danforth Foundation's institutes 1972-73 for community and junior colleges in which specific projects were designed to be implemented in certain colleges. Ranging from accountability of

teachers to bilingual curricular reform, these institutes brought forth many innovative plans. The effectiveness of these plans is being tested, and the results will be published by the Center (Martorana, 1974).

Statewide planning and coordination has been a development that has accelerated in the seventies. To determine whether the state 1202 Commissions proposed in the Federal Higher Education Amendments of 1972 will contribute to greater unity and cooperative effort among postsecondary institutions or drive them farther apart, an essay on education (Martorana, 1974) made some observations about the relevant current condition in statewide planning, discussed the impact of the commissions, and drew some conclusions. The author stated convincingly that statewide planning was going to become even more prevalent and that the "1202 Commission" type of planning effort would be essential for the future, even if the motivation does not come from federal legislation.

A growing institutional concern for more adequate planning tools has been another recent development. In order for a university to plan, it needs an appropriate method to assess its productivity and data to determine the strengths and weaknesses of current programs. The "production mode" based on a ratio of output to input has become increasingly difficult to evaluate as an indicator of university performance. A Center report entitled *Productivity and the Academy: The Current Condition* (Toombs, 1972) dealt with the problem of measuring the productivity of the faculty and the individual institution as well as of the educational system as a whole. A more theoretical model considering productivity adjustment as it appears in higher education has been published as an ERIC Research Report, *Productivity: Burden of Success* (Toombs, 1973).

Turning to an evaluation of current programs, *The Quality of Graduate Studies: Pennsylvania and Selected States* (Millman and Toombs, 1972) compared graduate programs in the Commonwealth with those in other states. If Pennsylvania is to be brought to the level of what might be called its "peer states," according to this Center report, it needs to become more fully committed to planning for high quality graduate programs and to implement these plans. To assess the effectiveness of the state-owned college system, a Center report (Toombs and Millman, 1973) examined enrollment patterns and degree output of the "state-owned" institutions of Pennsylvania. The findings indicated that both enrollment and degree output increased rapidly over the past decade, testifying to the effectiveness of these

institutions and their contribution to the educational resources of the Commonwealth. Although they have been highly successful in the recent past, they are now facing the new demands of program renovation and institutional planning. Another evaluation, *Exceptional Graduate Admissions at The Pennsylvania State University* (Gunne and L. Leslie, 1972), studied the procedures and admission decisions applied to graduate students at Penn State. Also published as a journal article (L. Leslie and Gunne, 1972), it revealed that the change to non-traditional criteria has apparently not resulted in the admission of inferior students. Based on the perceptions of faculty members, specially admitted students did not appear to differ importantly from traditional students on the graduate level.

Producing degrees, preparing educational programs, and structuring the curriculum are the base-level functions of the internal educational system. The degree structure was analyzed in "Academic Degree Structures—A Point of View" (Anderson, 1972). His article explained that, despite the diversity of degree designations, four levels basically comprise the higher education degree structure; however, these levels do not assure the quality of the degrees. Anderson noted the increased attention recently paid to the university without walls and the external degree, but observed that these programs were neither especially innovative nor particularly active at this time. After assessing the existing degree structures and the programs considered to be new, several principles and conditions were suggested for introducing creative structural and substantive changes. Dealing with only one level of the degree structure, "Radical Surgery on the Master's Degree" (Toombs, 1973) pointed to some criticisms of the degree and suggested ways in which it could be restored to respectability.

The current educational programs and curricular structures are constantly being scrutinized by the scholar and the student. In *The Academy and General Education* (Ikenberry, 1970), general education programs were singled out for criticism in light of the growing societal pluralism, expanding contemporary culture boundaries, and increased technological advancements. As the report emphasized, no longer could programs of general education impose rigid course requirements, perpetuate only the culture of Western civilization, and mass produce lower-division instruction. *Half a Century of General Education* (Anderson, 1973) examined the three major themes for general education over the last half-century and stated the reasons why educators in the last two decades have paid less attention to this area of the curriculum.

Professional education has been of particular interest to the Center staff. A recent paper that approached education for the professions in a generic sense has been prepared for ERIC publication. "Trends in Education for the Professions" (Anderson, 1974) examined the commonalities of concerns and processes among the several professions in order to delineate contemporary and emergent trends. Professional goals and objectives, the processes of recruitment, curricular change, and continuing education were among the topics discussed at length. The paper also dealt with the relationships between professional schools and their respective universities, practicing professionals, and society as a whole. A number of problem areas common to the professions had been discussed in an earlier article called "Misery *Has* Company" (L. Leslie and Anderson, 1972). The intent of this article was to increase the awareness of professionals of the comparative aspects of education for the professions so that they might gain a clearer perspective and benefit from the successes and failures of other professionals. This article followed a Center report, *Professional Education: Some Perspectives; 1971* (L. Leslie, Mortimer, and Anderson, 1971), that also identified major problems in professional education. Interviews and documents were analyzed and then applied to the practices of professional education at the Penn State. The final section interpreted the concepts of the literature and analyzed them in terms of the larger society. Publications dealing with the social implications of professional education have been given further consideration under the section—higher education and social structures.

The graduate student's involvement in research was assessed in an ERIC document called "Graduate Education and Sponsored Research" (Toombs, 1971). This study intended to discover and examine the relationships between the experiences of recent Ph.D. recipients, the origins and uses of research resources, and the perceptions and uses of the research efforts within the University of Michigan. While revealing significant differences between the non-research group and the research-connected groups in certain categories, the findings indicated that research appeared to exist as a "separately identifiable activity" in student experience. The sources and extent of support for graduate student research in various fields have also been studied, and the results have been published in a journal article, "Research Support for Graduate Students" (Hobbs and Anderson, 1969).

Review of educational programs often leads to suggestions for curricular reform. *The Changing College Curriculum—Issues and Implications* (Anderson, 1970), later published as a

journal article (Anderson, 1970), set several guidelines for reform. Rather than advocating a significant departure from a knowledge-based, discipline-controlled, subject-centered curriculum for American colleges, it suggested that higher education should remain intellectual in content and method, should influence value commitments, and should be conducted with style. Within these parameters, each institution should have a reasonable perspective on itself and express its own integrity, style, emphasis, and value system.

Discussing some innovative and experimental means for curricular reform, *Instructional Systems in Higher Education—Specifications for Individualization* (Ikenberry, 1970), also published as a journal article (Ikenberry, 1971), set forth ideas which would adapt the system of higher education to individual learning differences. First, several troublesome characteristics of the higher educational systems were identified; then, specifications were given for an instructional design to alleviate these problems. Among other suggestions, the design would be independent of time restrictions, maximize student involvement, utilize principles of positive reinforcement, and insure appropriate sequencing of learning experiences. Mindful of the changing times and the decreasing homogeneity of the student population, an article, "Reorganizing Instruction: Time and Content" (Kuhns and Martorana, 1974), discussed the characteristics and implications of instruction organized according to concurrent courses, time modules, academic modules, and competence evaluation for the purpose of accommodating individual differences.

Teacher preparation should be a continuous process with well-planned pre-service and in-service programs. "Some Relationships Between Student Teachers' Perceptions of Cooperating Teachers and Changes in Student Teachers" (L. Leslie, 1971), evaluated one possibility of improving the student teaching experience. It used a sample of fifty student teachers from the University of Utah working with cooperating teachers from the Salt Lake City metropolitan area. From the data collected, careful selection of cooperating teachers did not seem to make a significant difference in promoting student teacher behavioral gains. The study repeated that ubiquitous phrase—the need for further research.

If the community college is to serve the local needs of the community and perform the diverse functions of compensatory education, occupational training, and academic preparation for the transfer student, the community college faculty should understand and support the goals set by the college. *Goals and Ambivalence: Faculty Values and the Com-*

munity College Philosophy (Bloom, Gillie, and L. Leslie, 1971), later published as a journal article (L. Leslie, Bloom, and Gillie, 1973), attempted to determine how the Pennsylvania community college teacher felt about the stated goals of the college where he taught. The population of this study was limited to faculty from the community colleges, private junior colleges, and Penn State's Commonwealth Campuses.

Particular emphasis has been placed on effective instructional improvement on the community college level and its relation to faculty training. Since the community colleges often serve students who do not perform in traditional terms of success in traditional learning systems, faculty might be trained to teach these students effectively. An occasional paper (Ross, 1972) discussed the need for a program designed specifically for preparing the community college teacher. Three possible alternative programs were presented, and an extensive annotated bibliography was provided. Emphasizing the need to review and upgrade the practices of the teaching faculty, "Toward Improving the Learning Process" (Martorana, Purtell, and Reynolds, 1973) described a project that developed a state-wide model for New York State community college faculty. In this project, goals were set; summer workshops were organized for faculty to learn the systems approach; and the teaching procedures were then incorporated into the classroom learning situations. An article, "Suggestions Concerning Institutional Training of New Faculty" (Hammons, 1973), also advocated well-planned faculty development programs. A two or three week workshop for faculty involvement was suggested. Faculty attending the workshop would spend the time writing measurable learning objectives, constructing self-instructional learning units, developing course syllabi as well as becoming more familiar with the goals and objectives of the community college and the community college student. The article recommended procedures to follow in setting up faculty development programs and cautioned about possible problems that might be encountered. Prepared for the National Laboratory for Higher Education, an administrative manual has been devised to enable faculty members to employ the same process that is advocated for learners. *Instructional Improvement Training Series* (Schmidt and Hammons, 1973) used a systems approach to individualized instruction. It consists of an introduction and three units, each unit containing a rationale statement, performance objectives, a pre-test, learning activities, a post-test, and a strategy for systematic collection of revision data.

Students have attempted to reform higher education by offering alternatives to the present educational programs. Among the alternatives were the extracurricular "Free University" programs at Penn State which students developed to increase the interaction between faculty and students and to intensify the "intellectual pulse of the student body." A Center report, motivated by this constructive innovation, was entitled *COLLOQUY: A Student-Initiated Reform in Higher Education* (Hull, 1970),

As a viable entity, sensitive to the expectations of society, the university must relate to the social structure, the economy, the fiscal and tax structure, and the political structure. The Center staff have studied and analyzed this interaction between the university and society. When viewing the university's relationship to the social structure, the Center has studied education of professionals for social responsibility, programs for human service occupation, compensatory programs, and provisions for greater inclusion of blacks, women, and the disadvantaged.

Among the issues facing the professions are adequate health care in the central cities and rural areas, the improvement of the welfare system, legal services for the poor, education for the disadvantaged, and the preservation of natural resources. A journal article, "Social Change and Professional Education in American Society" (L. Leslie and Morrison, 1974), discussed increased societal demands upon the professions and systematically examined the relation of the professions to social problems. The article suggested that the professional education process was the strategic locus for effecting change. A monograph, entitled *Innovative Programs in Education for the Professions* (L. Leslie, to be published, Spring, 1974), has described exemplary professional school programs currently underway. By studying these programs which are educating professionals for social responsiveness, the monograph has identified means by which professional schools can respond to the urgent and rising needs of society.

Oftentimes, the para-professional can best serve certain manpower needs in the human services occupations. Aided by a grant from the Penn State Foundation, the Center published a handbook called *Human Services Occupations in the Two-Year College: A Handbook* (Kiffer and Burns, 1972). Designed to provide information for community college and other two-year college administrators about human service occupations, the objectives were three-fold: (1) to describe the present status of human service education; (2) to anticipate

the direction human service education will take in relation to emerging human needs; and (3) to propose curricular models to meet these evolving priorities. The term "human service occupations" was broadly defined, for purposes of the study, as those occupations which help to fulfill physical, psychological and/or societal human needs.

College education has traditionally been an important avenue for upward social mobility and, in some cases, employability *per se*. In response to the frustrations and grievances of certain minority groups, compensatory education has been developed to allow persons from the lower socio-economic strata to "compete in the contest for upward mobility." A Center report, *Compensatory Educational Programs in Two-Year Colleges* (Morrison and Ferrante, 1973) discussed compensatory education as it has been reported in the literature and then as it has been practiced by the institutions participating in the survey. The report explained that the community college can provide an opportunity for the disadvantaged. Through its "open" admissions policy and its academic and vocational training, the community college can direct a student toward an achievable goal, either in a transfer program or in an occupational program.

Since the demand of black students for higher education was unprecedented in the late 1960s, a Center publication, *The "Special Admission" Student and the Colleges* (Hull, 1969), reported on the preparation of the various colleges within Penn State toward the arrival of a group of "special admission students." It sketched the anticipatory plans and preparations for this primarily black group of students as seen from the deans' perspectives. A review of the growing body of literature on blacks in higher education (Hull, 1969) complemented the initial effort and placed it in a national perspective. Another report, *Higher Education and the Black Atypical Student* (Hull, 1970), posed the question as to how a higher education institution is to respond to the issues of admissions, compensatory education, and to the provision of courses in "Black Studies" in the context of contemporary American society.

In speaking about the problems of the disadvantaged, the educational inadequacies of the urban disadvantaged require special attention. A publication devoted to bringing the urban student into the mainstream of American life (McMurrin and L. Leslie, 1971) has discussed the means by which educational institutions can adjust to the different cultural patterns and personal motivations in ghetto life and reach the goals of assimilation for the

urban student. Dealing specifically with the curricula of the urban schools, "Relevance and Self-Image in the Urban School" (L. Leslie and Bigelow in McMurrin (ed.), 1971), stressed the need for a curriculum based on the real life interests and experiences of the students and directed toward improving the self-image of minority students. Since special courses seem to lead to further segregation and separatism, the authors suggested an alternative strategy to accomplish these goals. This strategy would be to integrate history and social studies so that it would include minority cultures and to pluralize the culture of the schools themselves. In such a way, the white students as well as the minority students would be informed of the contributions made by the various cultures. A journal article (L. Leslie and Bigelow, 1970) has also described this alternative in respect to a "Black Studies" program. An urban institution of higher education has been proposed to help solve the problems of the cities. "The Land-Grant University and the Urban Condition" (Anderson, 1972) explored the possibility of using the land-grant university as a model. A detailed explanation of the land-grant institution showed that its service function has been performed through basic and applied research, translated into useful outputs and conscious programs of education. Designed in a similar fashion to combine the functions of research, teaching, and service, the new urban institution would stress human associations, interactions, and values and would complement the various agencies now involved in the problems of urban life.

Increasingly, women have been aligning themselves with those who are considered disadvantaged. Many women feel that their participation in higher education has been limited largely because of prejudiced assumptions about women and their roles rather than an objective evaluation of their abilities. Early in 1970, the Penn State University Senate considered the question of increasing admissions for women. Consequently, the Center sponsored a paper (Richard, 1970) that dealt with both philosophical and practical considerations in changing the male/female ratio within the University. The study served a two-fold purpose—it presented substantive information about the admission of women and also illustrated the application of systems analysis to an educational policy matter.

In dealing with higher education and the economy, the Center has become involved in occupational education and in employment opportunities for the college graduate. For five years the Center has given financial and other support to annual conferences on occupa-

tional education in postsecondary institutions. These conferences have appealed particularly to Commonwealth college and community college administrators and faculty. A professor in the Department of Vocational Education of the College of Education and Associate in the Center organized these conferences, and the Center issued their reports (Gillie, 1970; 1971; 1972; 1973; and 1974 in press).

A quotation from the Occupational Education Act of 1971 warning that the inadequate opportunity for postsecondary occupational education "adversely affects vital national economic and social goals" set the tone for an article on students in programs of occupational training. "The Occupational Student" (Martorana and Sturtz, 1973) described the growth of occupational programs, particularly at the community college level, and defined the "occupational student." A work experience program, called Cooperative Education, was recommended as a means to facilitate the transition from school to work, to improve perceptions about the work situation, and to increase motivation to study. Certainly, the problem of transferring students from the college community to the working world is an acute one that requires further study of the employment articulation process and more cooperation between the community/junior college and the socioeconomic structure of society.

The need to find appropriate places in the labor market for college graduates has increased the sensitivity of higher education to the transaction between education and the economy. *The Comm-Bacc Study: Postbaccalaureate Activities of Degree Recipients from Pennsylvania Institutions 1971-1972* (Toombs, 1973) compared graduate choices for employment with existing employment options. Although a larger proportion of the graduates were delayed in finding a job and many accepted jobs not closely identified with their major, the study found few graduates leaving the state for employment reasons. *Comm-Bacc* (Commonwealth Baccalaureates) suggested a need for more short-term and geographically confined studies on the problem and made several recommendations about manpower prediction and student choice. An article that analyzed the findings of this study, "A Statewide Study of Placement" (Toombs, 1974), suggested some approaches and techniques that might be useful to placement offices. An earlier article, "Placement: A Study in Futures" (Toombs and Frisbey, 1972), perceived that the placement office could play a "pivotal role" in providing and interpreting data about the employment situation.

Because of the increased expenses of a college education and the tightening of resources, the university's relationship with fiscal and tax structures has been subject to intense study and research. *The Rationale for Various Plans for Funding American Education* (L. Leslie, 1972) explored the complexity of this relationship. Since society as well as the individual reaps the rewards of higher education, this report studied the controversy over the individual benefits theory, in which the student pays full cost tuition, and the societal benefits position, in which the tax structure carries the burden. Double taxation, the finance of private institutions and the implications of access are among the questions of higher education funding discussed in this report. A paper submitted to the Committee for Economic Development (L. Leslie in *Management and Financing of Colleges*, 1973) considered the pros and cons of financing through students as opposed to financing through institutions.

Several current proposals have recommended financing through students. A study, presently being conducted, will analyze the effect of providing direct financial aid to community college students (L. Leslie, Martorana, and Fife, to be published). A Center report on applying the market model to government finance of higher education through students (L. Leslie, 1973) laid the groundwork for a more theoretical journal article, "The Market Model and Higher Education" (L. Leslie and Johnson, 1974). These reports questioned whether the market model is compatible with the basic values of American higher education even though the trend toward viewing the students as consumers has emerged primarily to serve two noble purposes—to equalize educational opportunity and to respond to the current financial crisis in higher education. While the authors approved of some of the theoretical outcomes of the market model, they held strong reservations about endorsing it as a method of higher education finance. The whole concept of financing through students has raised the question of whether government support has imposed an unfair burden upon the middle class. For the purpose of increasing educational opportunity for low-income students, proposals have been made to raise public tuition and expand grant programs. The impact of these proposals upon the various income levels has been evaluated in "Equity and the Middle Class: On Financing Higher Education" (L. Leslie and Johnson, 1974). The study revealed that these proposals would result in a "regressive distribution of the burden" which would be carried by the middle-income student and his family.

Government financing, statewide coordination, and accountability are some of the areas of concern in higher education that will lead the university into a closer relationship with political structures. One of the Center staff is a co-author of a book called *The Politics of Higher Education* (Martorana, Blocker, and Bender, to be published) which demonstrates that higher education can no longer be viewed as apolitical. The book will delve into the workings of institutional, local, state, and national politics, including the bureaucratic structure and higher education associations. The legislative efforts, Congressional debates, political compromises, and various pressures involved in the passage of Title X relating to the community college and occupational education have been reviewed in an article entitled "The Higher Education Amendments of 1972" (Martorana and Sturtz, 1973). The preparation of this legislation revealed an increasing interdependence of Congressional leaders and educators. In concluding the chronological history of this legislative drama, the authors recommended a further strengthening of these liaisons. Suggesting that positive initiative of this type would be the best defense against propositions that threaten the autonomy of higher education institutions, a paper presented to the Pennsylvania Association for Higher Education, "Can Higher Education be Bullish About Americans" (Martorana, 1973), advocated "more involvement with political leaders and the general public—not less." Rather than fearing governmental control and assuming a defensive posture as a reaction to societal criticism, higher education must move to take the offensive, to find the better solutions, to enter into the public debate, and to fulfill societal expectations responsibly.

Over the past five years the Center has studied both the internal workings of the university and the university's relationship with society as a whole. A few major issues of higher education have been studied on a continuing basis while other issues have been reviewed on a more limited scale. From the time of its conception to the present, the Center's intent has been to study issues, problems, and policies of higher education in a general sense as well as in a defined area. Therefore, the first publication of the Center was appropriately a bibliography of higher education delineating some of the major works in the field which had been published before the founding of the Center. The bibliography has already gone through one revision (Anderson, 1969; Revised 1972) with another now underway.

The Center publications have a wide distribution. From six hundred to one thousand copies of our numbered reports, monographs, and conference reports are generally ordered.

The mailing list contains approximately eight hundred names from which recipients are selected according to their interests. Those on the list associated with Penn State include the Trustees, all principal administrative officers, and members of the faculty senate. All mailings include the Commonwealth Campus personnel. Occasionally reports will be sent to all departmental chairmen, and most reports are sent to those chairmen who might be concerned with the subject of the report. The mailing list includes presidents of all state colleges and community colleges, and directors of institutional research in these colleges. The list also includes selected members of the State Department of Education, the Pennsylvania Education Association, the officers of the Pennsylvania Association of Colleges and Universities, and the secretary of the private college association. The names of approximately seventy-five persons in the higher education associations at One Dupont Circle and in major universities with significant higher education research or teaching programs are included. The mailing list is continuously revised to assure its adequacy.

Normally, single requests and occasionally multiple requests from associations can also be accommodated. Frequently, extra reprints of journal articles authored by Center staff are secured and made available to appropriate persons on the campus. If the materials are not disseminated, when worthy, a significant waste of resources has occurred.

The question does remain, "What is a useful report?" By and large, the Center staff believes a useful report is one which provides findings, sometimes descriptive, sometimes analytical, sometimes statistically inferential, which will guide those who are making decisions or formulating educational policy. Such reports seldom provide answers, but they should always contribute to understanding. Sometimes such reports can reveal with clarity issues that were previously not sensed or were at best cloudy. Sometimes they reveal that answers which one would like to have cannot be given. Or they may reveal that answers which seem significant are actually simplistic and misleading. Current concern with the productivity of higher education is a case in point. "End of year measures," such as degrees granted, give no indication of the quality of the degrees; their quality may be determined only as the years go by and the University's alumni reveal their record of service. Similarly, the products of research may not reveal their significance or utility until long after the reports of the research are published.

IV. SERVICE AS "CONSULTANTS IN RESIDENCE"

The Center serves the Penn State University community in a role that can perhaps be described as "consultants in residence." Before elaborating on this function, it is necessary first to state that the Center is not a standard *institutional research* organization. Such an institutional research office does exist in the University as a part of the organization associated with university planning and budgeting. Also, some of the work performed by the Center in its role as "consultants in residence" has subsequently been published; therefore, it has been mentioned in the preceding section under studies relating to higher education policy and operation. Any repetition of this work is hopefully justified by placing it in the context of the needs and requirements of the Penn State community. Finally, at times this third role transcends the confines of this University and encompasses a scope of activity that includes state, regional, and sometimes national affairs.

One of the Center's first efforts was a request from the President of the University to present a variety of designs for a University Senate, as the Senate then in existence was being reorganized and its authority modified. The Center responded. As Dr. Mortimer of the Center staff had done significant research on faculty participation in governance, including roles of faculty working in or through senates, under his direction and with the assistance of two graduate students, a report was prepared that assisted the President in his model selection.

Two of the Center staff, the Director and Stanley Ikenberry, in its first years gave assistance to the President and his associates in analyzing a draft document of a State Master Plan for Higher Education and preparing papers responsive to it. The prose of one of the staff was embodied in the final published state plan.

In its first years under President Oswald, the University prepared its own *Academic Policy Plan.* A Commission on Planning and three task forces had been designated by the President to be involved in the University planning activity. These operated under a Vice President for Planning. Four Center staff—the Director, Dr. Ikenberry, Dr. Toombs, and Dr. Mortimer, served as consultants to the Commission and the Task Forces. Several background draft papers were prepared by Center staff. Three of the graduate assistants from the Center interviewed faculty and administrators under the supervision of a planning staff associate gathering data relative to planning. Three of the staff—the Director, Dr. Mortimer, and Dr.

Toombs—were members of a committee of seven that wrote the final report. The Center's contribution was considerable.

During the last several years a variety of activities directly related to University operations have been carried out. A study was made by Larry Leslie and Manuel Gunne for the graduate school that evaluated an "exceptional admissions" program. An earlier paper prepared by a graduate student on the staff, Frank Hull, dealt with the university's response to the challenge to enroll and educate disadvantaged students. Kenneth Mortimer prepared two background papers for a University Commission on the Open University. The entire Center staff met with the Committee on Academic Affairs of the Faculty Senate—reviewing for the committee current critical issues in higher education with special emphasis on the Carnegie Commission's publications. On another occasion three of the Center staff worked with a Senate committee that was charged with the responsibility of reviewing and revising general baccalaureate degree requirements. In addition to participation in committee discussion, two background papers, one by the director and another by Stanley Ikenberry, were prepared for the committee. Both papers have been published in journals.

Kenneth Mortimer, a Center staff member whose principal interest is governance, has given major attention in the last three years to faculty unions and to the processes of collective negotiation or bargaining. Because of his expertise in this area, he was asked by the University Senate to speak to it about faculty unionization, descriptively and analytically. From the spring to the fall of 1973, he addressed approximately twenty different college, branch campus, and department faculty meetings on "Issues in Collective Bargaining." Beginning December 1972 through January 1974, Dr. Mortimer was on a half-time appointment as special consultant to the President of Penn State, directing the University's planning efforts in preparation for collective bargaining, should it come. This assignment involved writing background papers, directing institutional research studies on matters relevant to faculty unionization, and preparing contingency plans. This assignment officially terminated December 31, 1973, but special assignments are still accepted. It should be noted that this role was fulfilled without partisanship. Neither the faculty nor administration can validly assert that this staff member is either "pro" or "con" relative to unionization.

Another staff member, William Toombs, whose expertise in graduate education, in studies of students, and in manpower studies, has served as "consultant" to several university

committees—graduate and administrative. He worked on the "productivity" issue for the University's Council of Academic Deans, and supervised the work of a graduate student who organized and interpreted data concerning students in the College of Liberal Arts. These findings were presented to the faculty of this college. He served as a resource person for the Eastern Regional Fulbright-Hays Conference this year and has a continuing commitment, using one-third of his time, to the National Science Foundation project, which is developing a research structuring and evaluation process. As a conference participant to the Pennsylvania Research and Development Priorities Workshop of March, 1973, Dr. Toombs submitted a paper that considered some of the cross currents of change in higher education. In these fields and related areas he has been a University representative to statewide councils and committees and to national conferences.

As an outgrowth of his work with certain national organizations and national study groups, Larry Leslie of the Center staff has become particularly useful to the President's office, as he has been in the midst of the present nationwide discussion as to how higher education should be financed in the coming decades. Pennsylvania higher education institutions have formulated and published their unified position regarding higher education financing in the Commonwealth, and Dr. Leslie has been a primary staff resource for the development of related documents.

Again acting in a consultative role, Leslie has advised the University's Director of Federal Relations. He has performed tasks including the provision of data and the development of position papers concerning alternative methods of higher education finance that might be adopted nationally. While being careful to preserve the scholarly objectivity of the staff member, the University's federal representative has seen to it that the Land-Grant Association, the National Postsecondary Finance Commission, the House Committee on Education and Labor, and selected Congressmen among other groups and persons have had the benefits of inputs from this colleague in the Center.

Dr. S. V. Martorana was asked to make a survey and analysis of the programming and administration of an upper division branch campus of the university that was still young and was in the process of continuing program development. This report was prepared with the considerable assistance of the students in a class he taught. In addition to preparing the report Martorana has met with faculty and administrators of this campus to discuss his find-

ings and recommendations. It is assumed that this report will be basic to planning for the future by this university unit.

The two Center staff members most involved in education at the community college level, S. V. Martorana and James Hammons, have reconstituted a Steering Committee of Community College Presidents of Pennsylvania. The purpose of this committee is to provide advice regarding the development of programs, courses and services which Penn State should sponsor and to serve as a contact for other cooperative endeavors.

One final activity will be noted. The University President expressed concern in the summer of 1972 that the University should subject itself to a thorough program review. The President asked the Center Director to prepare a paper to be used as the basis for a program review, including a process. This was done. Coincident with this activity and correlative to it, the Center Director assisted the University Council in preparing a paper that could serve as a base for priority decision making concerning new programs. Plans are now nearing completion for University-wide program review; the process to be used in this review is a refined and modified plan flowing from the original papers prepared by the Center Director. Not unrelated, it seemed important that the College of Education, confronted with the task of finding a dean, subject itself to an intensive and comprehensive review of its program, looking forward to a contemporary statement of its mission, a modification of its organization, and a plan for programming in terms of both established and speculative trends. The Director of the Center, now serving as Acting Dean of the College, is supervising the College's self study.

What observations are in order concerning this "consultants in residence" role for the Center and its staff? A significant advantage of this service is the degree of visibility that the Center has within the university. Many of the activities carried out have been professionally stimulating and rewarding. Ten to twenty-five percent of a Center staff member's time in any given year is spent in such activity as described above. In two instances it has resulted in special assignments that have required one-half to three-fourths of a member's time for a year. In another instance, the service of a Center staff member was not entirely unrelated to his appointment to a senior university administrative position. The quality of the service has generally elicited favorable reactions from university faculty and administrators. The Center believes it has strong support from University administrators including the President and the

Provost. Although the staff serves the central administration, each staff member believes that he has been able to maintain a high degree of professional autonomy. Finally, and of fundamental significance, no staff member has felt that his professional and scholarly integrity has been compromised nor has he felt constraints put upon him in expressing professional judgments, even though these judgments may not be shared by his university administrative of faculty colleagues. Academic freedom has been sustained.

V. WORKSHOPS, CONFERENCES, AND RELATED ACTIVITIES

In harmony with the University's land-grant tradition, the Center has tried to enhance the higher education programs, both public and private, of the Commonwealth. Relationships have been established with other colleges and universities, particularly in Pennsylvania, for the promotion of mutual cooperation and service. Through advisory consultation, conference participation, and Center-organized conferences and workshops, the staff members have sought to disseminate research findings, to encourage developmental activities, and to become more familiar with other institutions of higher education.

Annual conferences on occupational education in postsecondary institutions, which have appealed particularly to Commonwealth college and community college administrators and faculty, have received financial and other support from the Center. Dr. Angelo Gillie, Professor of Vocational Education and Associate in the Center, organizes these conferences, and the Center issues their annual reports.

Two conferences organized primarily by William Toombs were conducted in association with the Graduate School. At one, deans of the university and state community college presidents discussed graduate school programs relevant to community college teaching. A second conference brought together deans or directors of the graduate divisions of the State Colleges and deans of university graduate schools. Graduate professional education, specifically the professional master's degree, was the principal topic of this conference.

S. V. Martorana and James Hammons have arranged several conferences for the community college. These Center staff members have planned a Middle Atlantic regional conference for state and local officials on community colleges and community improvement to be held in Hershey, Pennsylvania June 19-21, 1974. They have also completed the preliminary

planning for a three-day conference for staff development facilitators of two-year colleges. This conference, sponsored by the Center, will be held at Penn State from July 1-3, 1974. A three-day conference this fall on developing individualized learning materials for two-year colleges is now being programmed.

To enumerate the various other activities, including consultation responsibilities, paper presentations, and conference participation, is beyond the scope of this report. These activities, however, have contributed to the Center's service function to the Commonwealth and beyond.

VI. THE FUTURE

As the Center looks ahead to the next five years, it foresees fulfilling the major roles that it has in the past, continuing to serve the Higher Education Department, the University, and the Commonwealth. New insights and visibility have been gained from its experience, and work is already progressing in areas of higher education which are demanding attention for today and for tomorrow.

The Center will continue its research in organization and governance. Research on the actions toward regionalization of higher education in the fifty states is a project to be carried out in the forthcoming year. The Carnegie Corporation has consented to a joint grant between the Institute of Labor and Manpower Studies at Temple and the Center for the Study of Higher Education to interpret the condition of collective bargaining in Pennsylvania.

The various elements of planning, including manpower needs, resource allocation, finance, and geographical availability, will stimulate continuing study and research. Staff development for community and junior colleges, independent colleges, and other four-year institutions will command serious attention. The nature and strategies of change in organizational development and placement activities will be among other areas of higher education analyzed in order to meet the planning needs of postsecondary education in society.

To improve the teaching-learning processes, there will be emphasis on new techniques for instruction. Teaching the disadvantaged student, particularly at the community college level, will be an area of evaluation, testing, and research. Education to enhance the social sensitivity of professionals and to increase human service will be an ongoing concern and challenge to the Center staff.

In all of its activities, the Center will be seeking to utilize and develop appropriate and precise methodological techniques. As in the past, the results of its research will be available to those in decision making and administrative roles as well as to interested faculty. The Center will continue in its unique capacity as an organization supportive of but independent from the department and as a research arm of the university and academic community.

VII. A SUMMING UP

Five years is but a short time in the thousand years that universities have been in existence. It is also but a short time in the nearly one hundred and twenty years since the founding of Penn State. It is our feeling that the Center's five-year existence, largely because of the quality of its staff and the openness of the University's administrators and faculty in receiving and accepting its reports, other publications, and services, has been long enough to demonstrate its validity and viability.

The financial support provided by the University has always been adequate to maintain the basic operation. Grants and other resources made available on occasion have not been lavish, but they have permitted the Center to carry out some of its more substantial projects. So far, only one hard-cover book has been written by Center staff: Ikenberry and Friedman, *Beyond Academic Departments.* But two of the ERIC/AAHE monograph series were prepared by Center staff, Kenneth Mortimer's monograph on accountability (the first of the series) and William Toombs' on productivity. Two other ERIC/AAHE monographs have been accepted and should be in print by September of this year: Anderson, *Trends in Education for the Professions* and Leslie and Miller, *Higher Education and the Steady State*, dealing with no enrollment growths in colleges and universities.

Not only the quality but the stability of the staff have been significant in establishing the Center in its first five years. No member of the staff on a continuing appointment has left the Center except for Stanley Ikenberry's accepting a University Senior Vice Presidency. Dr. Ikenberry is still available for consultation and continues to play an active role as instructor and advisor in the higher education program. Stability and quality of staff brings an acquaintanceship about the campus that commands confidence and respect.

The Center has maintained its position that it does not make policy for the University. Rather, it hopes to present materials out of which policy can emerge. It has seldom if ever taken an advocacy role although the positions of its staff are often stated forthrightly and accepted as such by others within the University. When a position has been taken, analysis has generally accompanied the position statement. The Center staff members have had pride in the fact that they have been called upon to render special services to the University community. The staff believes that it has done so without loss of integrity as scholars and analysts. This is a compliment to the University as well as to the staff.

The association with the College of Education, the opportunity to serve as instructors and advisers in the higher education program, the high degree of interaction with students and particularly with the graduate assistants in the Center have not simply been personally rewarding to the staff but have been significant elements in the staff's productivity and professional satisfactions.

Numerous others have served in the Center, as staff assistants and associates—gathering and analyzing data, finding or preparing computer programs, editing manuscripts, taking down references, maintaining the library collection, and performing numerous other tasks associated with scholarly activity. The Department of Publication of the Penn State Press and Printing Services have also been responsible in preparing our publications. The clerical-secretarial staff has been professional in the highest sense of the word. Numerous faculty and academic administrators have offered counsel to the Director and members of the staff and have never appeared to have been imposed upon. The Center staff believes it has been fortunate to have an opportunity that does not often occur to experience both the excitement and success of a new venture in a stable university.

APPENDIX A: PAST AND PRESENT STAFF

These "notes" describe only those staff members appointed to the Center for the Study of Higher Education as associates. Part-time personnel have not been included.

APPENDIX A: PAST AND PRESENT STAFF

G. LESTER ANDERSON, Director of the Center, Acting Dean of the College of Education (1973-74), and Professor of Higher Education, earned a Ph.D. from the University of Minnesota, where he also became a full professor. Having served in successive roles as Dean of Teacher Education, Dean of Administration, Vice-Chancellor, Vice President for Educational Affairs, and Distinguished Service Professor of Higher Education, Dr. Anderson has long been interested in governance and administrative matters as well as in education for the professions and the land-grant university.

ANGELO C. GILLIE, SR., an Associate of the Center, is Professor and Chairman of Graduate Studies and Research, Department of Vocational Education in the College of Education. Before coming to Penn State, he served as an Associate Professor in the Graduate School of Education at Rutgers University. He has been involved in the community college system in Hawaii. His continuing concern has been for vocational-occupational education and the community college. He has also organized the annual conferences on postsecondary occupational education published by the Center.

JAMES O. HAMMONS recently joined the staff of the Center and of the College where he will be teaching and working on staff development activities with Pennsylvania's two-year colleges. Prior to joining the Center, he was a Program Associate of the Junior and Community College Division of the National Laboratory for Higher Education in Durham, North Carolina. Previous to that he was Dean of the College at Burlington County College in New Jersey for four years. He holds an M.S. in College Student Personnel from Southern Illinois University and a Ph.D. from the University of Texas.

STANLEY O. IKENBERRY, former Associate Director of the Center and Professor of Higher Education, now holds the position of Senior Vice-President for University Development and Relations at Pennsylvania State University. He received a Ph.D. from Michigan State University where he later held research and teaching positions. He has served as Assistant to the Provost, as Dean of the College of Human Resources and Education at West Virginia University, and as President and Board Chairman of the Appalachia Educational

Laboratory. Presently on the Board of Advisors of Alice Lloyd College and consultant for U.S.O.E., Dr. Ikenberry's varied background has given him an understanding of both the theory and practice of governance matters.

THEODORE E. KIFFER, a former Research Associate at the Center on a temporary appointment from September 1970 to June 1971, earned his M.A. and Ph.D. from Pennsylvania State University. He previously was an Associate Professor of Linguistics at Kutztown State College, a Senior Fullbright Lecturer and Associate Professor at the University of Liberia and an Associate Professor and Academic Dean at Berks Campus, PSU. He is now an Associate Professor and Director of the General Education Programs in Humanities at Penn State. While a member of the Center staff, his primary responsibility was to work on a project involving human services occupations in the postsecondary two-year college programs.

LARRY L. LESLIE, while holding an appointment at the Center, is also Chairman and Professor of Higher Education in the College of Education. Dr. Leslie earned an Ed.D. from the University of California at Berkeley. He has served as a consultant to the Office of Economic Opportunity, the Title III Office of the State of Wyoming, the Utah State Board of Education, and the Committee for Economic Development. He is concerned with education in the professions for social responsiveness and in the financing of higher education, not simply from an economic but also an educational, political, and social perspective. He is also concerned with a broad spectrum of methodologies relevant for research in higher education.

CHARLES L. LEWIS, who held a temporary appointment at the Center as Research Associate, now serves as the Executive Director of the American Personnel and Guidance Association. Previously, he was the Vice-President for Student Affairs at Pennsylvania State University, the Executive Dean and Associate Professor of Educational Psychology at the University of Tennessee, and Dean of Students and Associate Professor of Psychology at the University of North Dakota. He received his Ph.D. from the University of Minnesota.

SEBASTIAN V. MARTORANA, a Research Associate at the Center and Professor of Higher Education in the College of Education, served from 1965–72 as Vice Chancellor for Two-Year Colleges and Provost for Technical-Vocational Education at the State University

of New York. He was the Assistant Commissioner for Higher Education Planning, New York State Regents 1963-65; Chief of State and Regional Organization of Higher Education with the U. S. Office of Education, 1957-63; Specialist for Community and Junior Colleges with the U. S. Office of Education, 1955-57; and Dean of the General College at Ferris State College, 1953-55. He earned his Ph.D. at the University of Chicago. Dr. Martorana has directed statewide studies of all postsecondary education in Hawaii, North and South Dakota, Virginia, and New York, and has acted as consultant to governmental commissions in many others. His interests include long-range planning and coordination, the community college as a level of education, and occupational postsecondary education.

KENNETH P. MORTIMER holds a Ph.D. from the University of California, Berkeley. He was employed by the Center for Research and Development in Higher Education at Berkeley, where he participated in project research concerned with academic decision making. He has co-authored publications on faculty participation in university governance and academic decision making. In addition to his Center appointment as Research Associate, Dr. Mortimer is Associate Professor of Higher Education in the College of Education.

WILLIAM TOOMBS is Research Associate and Assistant Director of the Center. He is also Associate Professor in the College of Education. He received an M.A. from the University of Pennsylvania and a Ph.D. from the University of Michigan. Prior to joining the Center, he served on the staff of the Rackham School of Graduate Studies at Michigan. Dr. Toombs has taught sociology and held a Deanship in Student Affairs at Drexel University. His research interests include graduate education, manpower influences of educational policy, faculty development, and the educational effects of sponsored research.

APPENDIX B: VISITING PROFESSORS

Several professors have visited the Center for a limited period of time. A few biographical words and a statement of the primary reason or reasons for each person's visit have been included.

APPENDIX B: VISITING PROFESSORS

CLYDE E. BLOCKER, a visiting Research Associate at the Center from September 1972 to December 1972, earned an Ed.D. from Columbia University and has been President of the Harrisburg Area Community College since it was established in 1964. Dr. Blocker is also an adjunct Professor of Higher Education, College of Education at Penn State. As part of his work at the Center, he helped to prepare a book manuscript with S. V. Martorana on the politics of higher education as it related to community colleges.

NEIL S. BUCKLEW, Vice Provost of Central Michigan University and a member of the faculty of the Department of Business and Administration, was a visiting Research Associate at the Center and consultant on college personnel policy at Penn State from April 1973 to June 1973. He received his Ph.D. in Industrial Relations from the University of Wisconsin. A primary effort at the Center was a report on students and the labor relations model. Dr. Bucklew also conducted a seminar in the Higher Education program and served as a consultant to the administration of the University.

EDWARD WALKER GLAZENER, the Director of Academic Affairs in the School of Agriculture and Life Sciences at North Carolina State University, Raleigh, has a Ph.D. from the University of Maryland. He visited the Center from January 1972 to March 1972 in order to study and observe areas of governance, administration, curricular patterns, innovations, and media technology. Dr. Glazener was jointly sponsored by the College of Agriculture and the Center.

HANS-ULRICH KARPEN, a Senior Fulbright-Hays Fellow from the University of Cologne, Federal Republic of Germany, joined the Center as a Visiting Research Associate during October 1973. He received a Dr. Juris from the University of Kiel. Formerly an Assistant to the Rector of the University of Cologne, he now is a staff member on a new German-American project on admission policy in higher education sponsored by the International Council for Educational Development. While visiting the Center, much of Dr. Karpen's time was devoted to interviewing and meeting with individuals active in the areas of public law and planning in higher education.

DON A. MORGAN, Professor of Higher Education at the University of Minnesota, St. Paul, with a Ph.D. from the University of Portland, visited the Center from February 4-22, 1974. The focus of his study was to examine the nature of the current higher education centers and the literature relating to them. He also considered the relationship of two-year college training programs to such centers. The anticipated result of this study will be to forecast an optimum organization and focus for a projected center at Minnesota.

DEMETRIO PALOMINO BECERRA from Lima, Peru spent several months at the Center in the spring of 1973. He has a Ph.D. from the University of San Marcos, Lima, Peru. To become acquainted with a highly developed administrative organization in an American university, he became involved in a series of work experiences in Educational Administration at Penn State as part of the AACTE/AID Administrative Internship Program for Higher Education and Teacher Education.

APPENDIX C: GRADUATE ASSISTANTS 1969-74

This list includes all graduate assistants in the Center and their status as of April 1, 1974.

APPENDIX C: GRADUATE ASSISTANTS 1969-74

JANET N. BACON, M.A. (St. Louis University)
Present Graduate Assistant (Editor) and Candidate for D.Ed.

ANN KIEFFER BRAGG, B.A. (St. Olaf College)
Present Graduate Assistant and Candidate for D.Ed.

MARTHA A. BURNS, D.Ed. 1971 (Pennsylvania State University)
Director, Fellowship Program, American Association of University Women

CAROL E. CARBERRY, B.A. (Pennsylvania State University)
Graduate Assistant in Department of Higher Education and Candidate for D.Ed.

JAMES W. CARLSON, M.A. (Bucknell University)
Candidate for D.Ed.

DAVID SCOTT COLLINS, M.A. (Pennsylvania State University)
Chairman, Division of Social Studies, Virginia Highlands Community College

TIMOTHY R. DANGEL, B.A. (Pennsylvania State University)
Present Graduate Assistant and Candidate for Ph.D. in Educational Psychology

LEE ANN FELTWELL, M.Ed. (West Chester State College)
Intern, Antioch College of Columbia, Maryland and Candidate for D.Ed.

JONATHAN D. FIFE, M.S. (S.U.N.Y. at Albany)
Associate Director of ERIC Clearinghouse on Higher Education in Washington, D.C. and Candidate for D.Ed.

MANUEL G. GUNNE, M.Ed. (University of Maryland)
Acting Director of Educational Opportunity Program, P.S.U. and Candidate for D.Ed.

LOIS H. HECKMAN, M.Ed. (Pennsylvania State University)
Present Graduate Assistant and Candidate for D.Ed.

W. FRANK HULL IV, D.Ed. 1970 (Pennsylvania State University)
Director, Center for the Study of Higher Education, and Assistant Professor of Higher Education, University of Toledo

DAVID W. LESLIE, D.Ed. 1971 (Pennsylvania State University)
Assistant Professor of Higher Education, University of Virginia

G. GREGORY LOZIER, D.Ed. 1973 (Pennsylvania State University)
Research Associate, Office of Budget and Planning, P.S.U.

W. GARY McGUIRE, M.Ed. (S.U.N.Y. at Buffalo)
Present Graduate Assistant and Candidate for D.Ed.

HOWARD F. MILLER, JR., M.S. (University of Rhode Island)
Present Graduate Assistant and Candidate for D.Ed.

STEPHEN D. MILLMAN, Ph.D. 1973 (Pennsylvania State University)
Staff Specialist for Student Affairs and Services, Maryland State Board for Community Colleges

MARCIA A. MUDGE, M.Ed. (Pennsylvania State University)

ELIZABETH L. NELSON, M.Ed. (Pennsylvania State University)

MARY M. NORMAN, Ed.D. 1971 (Pennsylvania State University)
Executive Dean, Community College of Allegheny County, South Campus, West Mifflin, Pa.

HAROLD G. RICHARD, M.S. (Pennsylvania State University)
Systems Planning Specialist, Office of Budget and Planning, P.S.U. and Candidate for D.Ed.

NAOMI V. ROSS, M.Ed. (Pennsylvania State University)
Instructor in English, P.S.U. and Candidate for D.Ed.

J. LEONARD SALAZAR, M.Ed. (University of Utah)
Present Graduate Assistant and Candidate for D.Ed.

MICHAEL E. SHORR, M.Ed. (Pennsylvania State University)
Candidate for D.Ed.

ROBERT R. SMEDLEY, M.A. (John Carroll University)
Health Program Specialist, United Services Agency in Wilkes Barre, Pa.

ALAN J. STURTZ, M.A. (Pennsylvania State University)
Research Assistant, Graduate School, P.S.U. and Candidate for D.Ed.

DAVID G. WATKIN, B.A. (Pennsylvania State University)
Present Graduate Assistant and Candidate for D.Ed.

DAVID A. WEISS, B.S. (Pennsylvania State University)
Present Graduate Assistant and Candidate for D.Ed.

CHARLENE HONE WENCKOWSKI, M.Ed. (Pennsylvania State University)
Director of Institutional Research at Potomac State College of West Virginia University, Keyser, West Virginia

APPENDIX D: GRANTS RECEIVED

The Center has been the recipient of grants, direct or indirect, for several of its projects. The amount, recipient, and purpose of each grant has been stated. Reference to the publication of project results, when completed, has been provided in each case.

APPENDIX D: GRANTS RECEIVED

Carnegie Corporation of New York

A grant of $21,000 from a total of approximately $70,000 granted to the Institute of Labor and Manpower Studies, Temple University. Walter Gershenfeld, Director of the Institute of Labor and Manpower Studies at Temple University, and Kenneth P. Mortimer of the Center will study the state of collective bargaining in Pennsylvania. The Center activity is financed through a contract with Temple University.

Danforth Foundation

A grant of $10,000 to evaluate the Danforth Foundation's institutes 1972-73 for community and junior colleges. The results of this study will be published by the Center (Martorana, 1974).

Department of the Interior

A grant of $44,530 to the Institute of Research on Land and Water Resources at Pennsylvania State University for the study of water resources centers. John Frey was project director. This study in which the Center participated resulted in a research publication, "Water Center Organization and Management" (Anderson, Frey, Ikenberry, and Swope, 1972) and an article "A Rationale for Research Institutes" (Anderson, Frey, Ikenberry, and Swope, 1972). Data from the research were also used in the Ikenberry and Friedman book, "Beyond Academic Departments" (1972).

National Science Foundation

A grant of $81,600 to the Vice President for Research, a part of which includes the salary of part-time staff associate, Renee C. Friedman, and one-third salary of William Toombs, to participate as resource staff persons in a project to develop a research structuring and evaluation process. Associate Dean Henry Sams of the Graduate School is project director.

Pennsylvania State Foundation, Alumni Fund

A grant of $24,000 to the Center for the preparation of a book, *The Land-Grant University: Promises for Tomorrow* (Anderson (ed.), to be published).

A grant of $5,000 for printing a report on manpower needs in the human services occupations, *Human Services Occupations in the Two-Year College: A Handbook* (Kiffer and Burns, 1972). The grant was made directly to the Center.

State Department of Education

A grant of $7,708 to the Center for support of a study of Pennsylvania graduates and their choices for employment based on a set of employment and nonemployment options in a very short time period. The results were published in a Center report, *The Comm-Bacc Study: Postbaccalaureate Activities of Degree Recipients from Pennsylvania Institutions 1971–1972* (Toombs, 1973).

APPENDIX E: PUBLICATIONS OF THE CENTER

This bibliography includes all publications by the Center and works written by Center staff during their association with the Center but published elsewhere. It has been organized according to the framework used in the paper to discuss the literature.

APPENDIX E: PUBLICATIONS OF THE CENTER

Insights into Higher Education: Selected Writings of CSHE, 1969–73, Monographs. 3 Vols. University Park, Pa.: Center for the Study of Higher Education, 1974. (Vols. 2 and 3 in press.)

Studies of Internal Educational Structure:

Organization, Governance, and Accountability

Anderson, G. Lester; Kenneth P. Mortimer; W. Frank Hull, IV; and David Leslie. *Academic Senates: Some Models with Background Material.* Occasional Paper. University Park, Pa.: Center for the Study of Higher Education, 1970.

Anderson, G. Lester (ed.). *The Land-Grant University: Promises for Tomorrow.* To be published.

Anderson, G. Lester; John C. Frey; Stanley O. Ikenberry; and William M. Swope. "A Rationale for Research Institutes." *Science Review.* 10(1972): 35–36.

Anderson, G. Lester. "The Story of an Educational Merger: The State University of New York and the University of Buffalo." *Niagara Frontier.* 18(1971): 72–84.

Anderson, G. Lester; John C. Frey; Stanley O. Ikenberry; and William M. Swope. *Water Center Organization and Management.* Research Publication No. 72. University Park, Pa.: Institute for Research on Land and Water Resources, 1972.

Boyers, Ralph L. in collaboration with Robert E. Sweitzer. *Collective Bargaining in Pennsylvania: A Summary of Collective Bargaining Agreements.* Occasional Paper. University Park, Pa.: Center for the Study of Higher Education, 1973.

Bucklew, Neil S. *Students and Unions.* Report No. 22. University Park, Pa.: Center for the Study of Higher Education, 1973.

Bucklew, Neil S. "Unionized Students on Campus." *Educational Record.* 54(1973): 299–307.

Deegan, William L. and Kenneth P. Mortimer. *Faculty in Governance at the University of Minnesota.* Berkeley, Calif.: Center for Research and Development in Higher Education, 1970.

Deegan, William L.; T. R. McConnell; Kenneth P. Mortimer; and Harriet Stull. *Joint Participation in Decision Making: A Study of Faculty Government and Faculty-Administrative Consultation at Fresno State College.* Berkeley, Calif.: Center for Research and Development in Higher Education, 1970.

Hammons, James O. and S. V. Martorana. "A New Era for the Two-Year College." Submitted for publication.

Hobbs, Walter C. and G. Lester Anderson. "Academic Departments: Who Runs Them—and How?" Buffalo, N. Y.: Office of Institutional Research, State University of New York at Buffalo, 1970.

Hobbs, Walter C. and G. Lester Anderson. "The Operation of Academic Departments." *Management Science.* 43(1971): B134-B144.

Ikenberry, Stanley O. and Renee C. Friedman. *Beyond Academic Departments.* San Francisco, Calif.: Jossey-Bass Inc., 1972.

Ikenberry, Stanley O. *A Profile of Proliferating Institutes: A Study of Selected Characteristics of Institutes and Centers in 51 Land-Grant Universities.* Report No. 6. University Park, Pa.: Center for the Study of Higher Education, 1970.

Ikenberry, Stanley O. "Restructuring College and University Organization and Governance: An Introduction." *Journal of Higher Education.* 42(1971): 421-429.

Ikenberry, Stanley O. *Roles and Structures for Participation in Higher Education Governance: A Rationale.* Report No. 5. University Park, Pa.: Center for the Study of Higher Education, 1970.

Leslie, David W. *Student Unrest on the American Campus.* Bibliography. University Park, Pa.: Center for the Study of Higher Education, 1969.

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